

### **Amendments to the Specification:**

Please replace the paragraph beginning on page 2 at line 22 and carrying over to page 3 at line 4 with the following amended paragraph:

In most markets, the majority of ATSC channels available are currently in the UHF television bandwidth (470 to 806 MHz, or television channels 14-69), while continuing their National Television System Committee (NTSC) analog broadcasts on their originally assigned channels. When a high-enough market share owns ATSC-compatible televisions or set-top tuners the broadcasters will then terminate their NTSC broadcast and offer DTV broadcasting exclusively. Broadcasters with NTSC transmissions on VHF ~~lo-band~~ low-band (54 to 88 MHz, or channels 2-6) or VHF hi-band (174 to 216 MHz, or channels 7-13) have been given the option to retain their VHF channel for exclusive DTV broadcasting and terminating their UHF transmission, since less power and operating cost would be needed to transmit on VHF to cover the market area than UHF. However, until the time comes, a need exists for an inexpensive UHF television antenna for use by consumers who wish to view broadcast HDTV.

Please replace the paragraph on page 3, lines 5-30 with the following amended paragraph:

Like analog television tuners, ATSC digital tuners require a proper channel RF signal strength and signal-to-noise ratio (SNR) to ensure a clear, consistent picture. For analog channels, lack of or unnecessarily high signal strength, a high noise floor, or multipath signals reflected off neighboring structures results in snowy, grainy, or ghosted pictures. Most ATSC tuners require a channel signal strength of -18.5 to +15 dBmV with a minimum SNR of 15.2 dB to ensure the tuner receives the data at its maximum rate of 19.4 Mbps with a minimal ~~bit error rate~~ Bit Error Rate (BER), so that each digital picture broadcast on the 8VSB is displayed with the best possible resolution. Preamplifiers may be used to overcome signal loss due to cable runs and splitters, which is more noticeable on UHF channels than VHF. Conventional 75-ohm input/output preamplifiers have an average noise figure (NF) of 2.9 [[of]] dB or less. In addition, the noise floor at the receiver is raised depending on impedance mismatch between the signal to the receiver. Such a mismatch is expressed by the ~~voltage standing wave ratio~~ Voltage Standing Wave Ratio (VSWR), in which a value of 1 represents a

perfect impedance match, and higher positive values indicate a greater mismatch. While an overall bandwidth VSWR of 1 is very desirable, a more realistic VSWR of 1.5 is considered acceptable. Therefore, for good DTV reception, a need exists for a television antenna with a low VSWR to receive a DTV channel with a sufficient SNR. In cases where all the desired digital channels are coming in from the same direction, a need exists for an antenna with an average front-to-back ratio for DTV reception of least 10 dB, since it rejects interfering signals from the sides and back.

Please replace the paragraph on page 5, lines 6-13 with the following amended paragraph:

Tenants of multi-unit dwellings, including condominium owners, cooperative owners, or renters, install television antennas in areas where they have exclusive use, including a balcony or patio. For this reason, such tenants are able to place ~~direct broadcast satellite~~ Direct Broadcast Satellite (DBS) dishes on their balconies or patios. Rarely are such tenants able to install outdoor television antennas in such areas, simply due to the size of the antenna going outside the boundaries of the areas of exclusive use.

Please replace the paragraph on page 5, lines 14-26 with the following amended paragraph:

For consumers who want to view HDTV, a need exists for an off-air antenna having good gain, front-to-back ratio, and good VSWR in the operating band, but in an area of optimal reception where the antenna can be safely installed with the fewest obstructions. Such issues become more significant for VHF reception where low-band VHF reflectors on Yagi roof mounts can be as long as 110 inches for optimal performance. In addition, VHF channels are more susceptible to man-made noise effects, so a good signal strength may be necessary on such channels in areas with many obstructions and sources of electrical noise. A need exists for a small, low-profile television reception solution that is easy to install, loosens restrictions on where to install, reject multipath effects in busy urban areas, and ~~have~~ has good gain performance to ensure a strong SNR at the antenna.

Please replace the paragraph on page 9, lines 15-22 with the following amended paragraph:

In other embodiments, the low profile television antenna 10 of the present invention can be mounted externally to a structure such as a house, apartment, balcony, etc. It can also be used internally such as under a ~~roof~~ roof, on an overhead rafter, on a deck rail, or on a standalone support in a room. It can also be mounted outside a structure such as on a pole. Finally, the low profile television antenna 10 can be mounted on a vehicle such as a recreational vehicle or on a boat in the marine environment.

Please replace the paragraph on page 13, lines 6-15 with the following amended paragraph:

It is to be expressly understood that the grid 330 could be any geometric shape, including rectangular, circular, etc. It is also to be expressly understood that the reflector 260 could be of solid conductive material, such as thin aluminum, aluminum foil, or any other suitable conductive material. It is also to be expressly understood that the metallic grid 330 can be printed or deposited directly on surface 218 of the chassis 210 thereby eliminating the use of a separate sheet of material 340. This would simplify the design of a low profile television antenna 10 of the present invention and reduce its costs. Figure 3 for simplicity shows the two embodiments of the reflector 260 to be either deposited on sheet 340 or deposited directly on surface 218.

Please replace the paragraph beginning on page 19 at line 30 and carrying over to page 20 at line 7 with the following amended paragraph:

In Figure 10, the sinuous antenna 230 has its arms 230 formed into a wedge shape with the open end of the wedge shape facing the reflector 260. The reflector 260 is in circular shape with the inside of said curved shape facing the open end of the antenna 230. The antenna 10 is supported conventionally by a base 20. And the antenna arms are supported by a support 240. In Figure 10, the arms 230a, 230b are formed from conductive metals such as aluminum and the reflector 260 is also cut from aluminum. In this embodiment, there is no housing over the antenna 230 or the reflector ~~260 or~~ 260, nor is the antenna 230 or the reflector 260 using a dielectric sheet.